

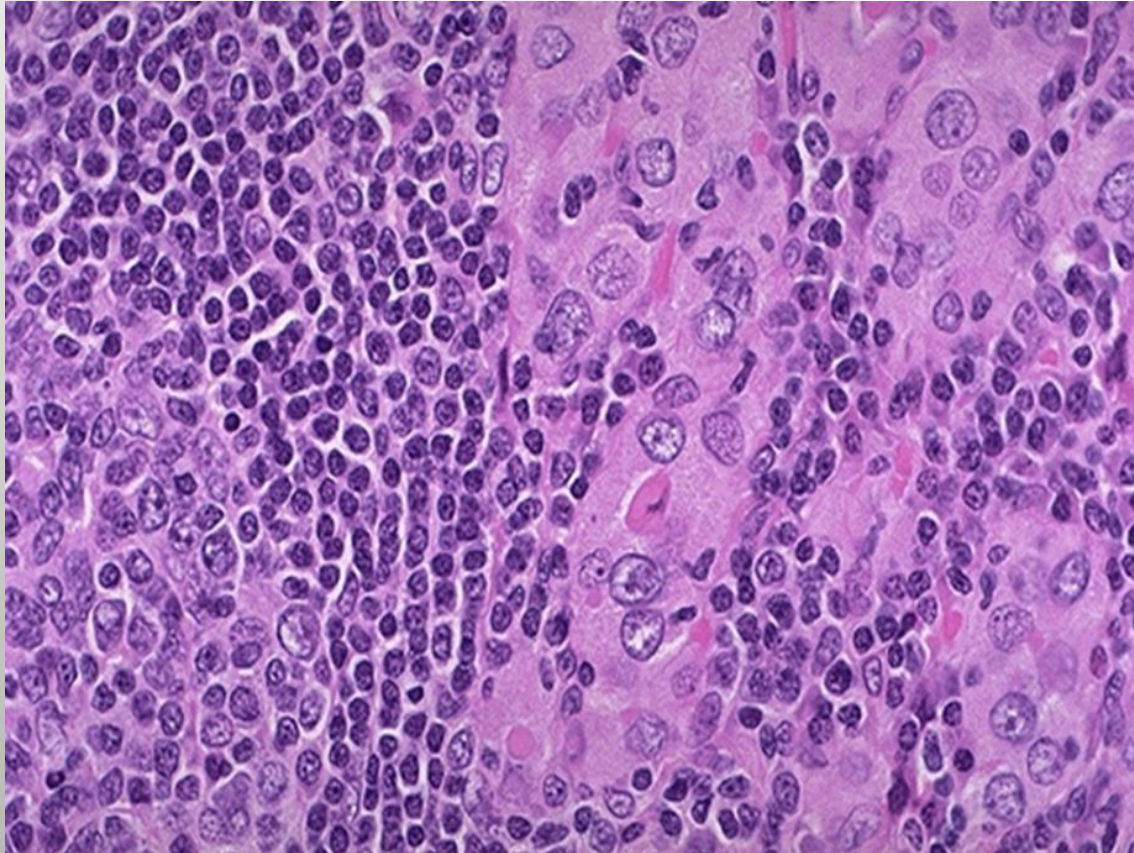


PBL-1-ENDOCRINE

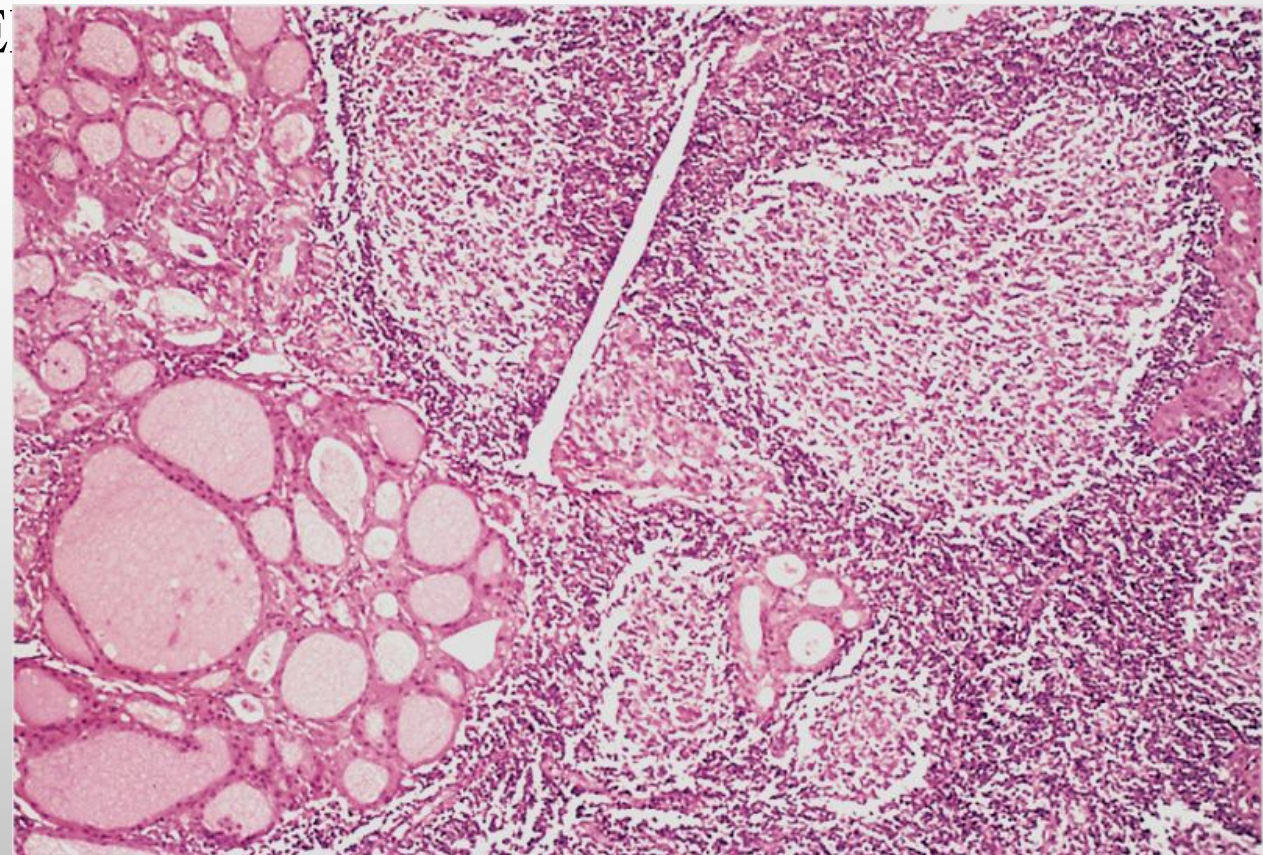
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09/10/2022

CASE 1 :- A 45 YEARS OLD FEMALE WITH HISTORY OF RHEUMATOID ARTHRITIS PRESENTED BY DIFFUSE PAINLESS ENLARGEMENT OF THYROID GLAND. BIOPSY FROM THYROID REVEALED THE THYROID EPITHELIAL CELLS HAVE GRANULAR EOSINOPHILIC CYTOPLASM WITH LYMPHOCYTIC INFILTRATE FORMING LYMPHOID



GE



a) What is the most likely diagnosis?

b) What is the pathogenesis of this disease?

c) What do you call this epithelial cells?

d) What is the expected picture of the thyroid function tests (T3, T4, TSH) in this disease?

E) Radioactive iodine scan finding ?

Answers

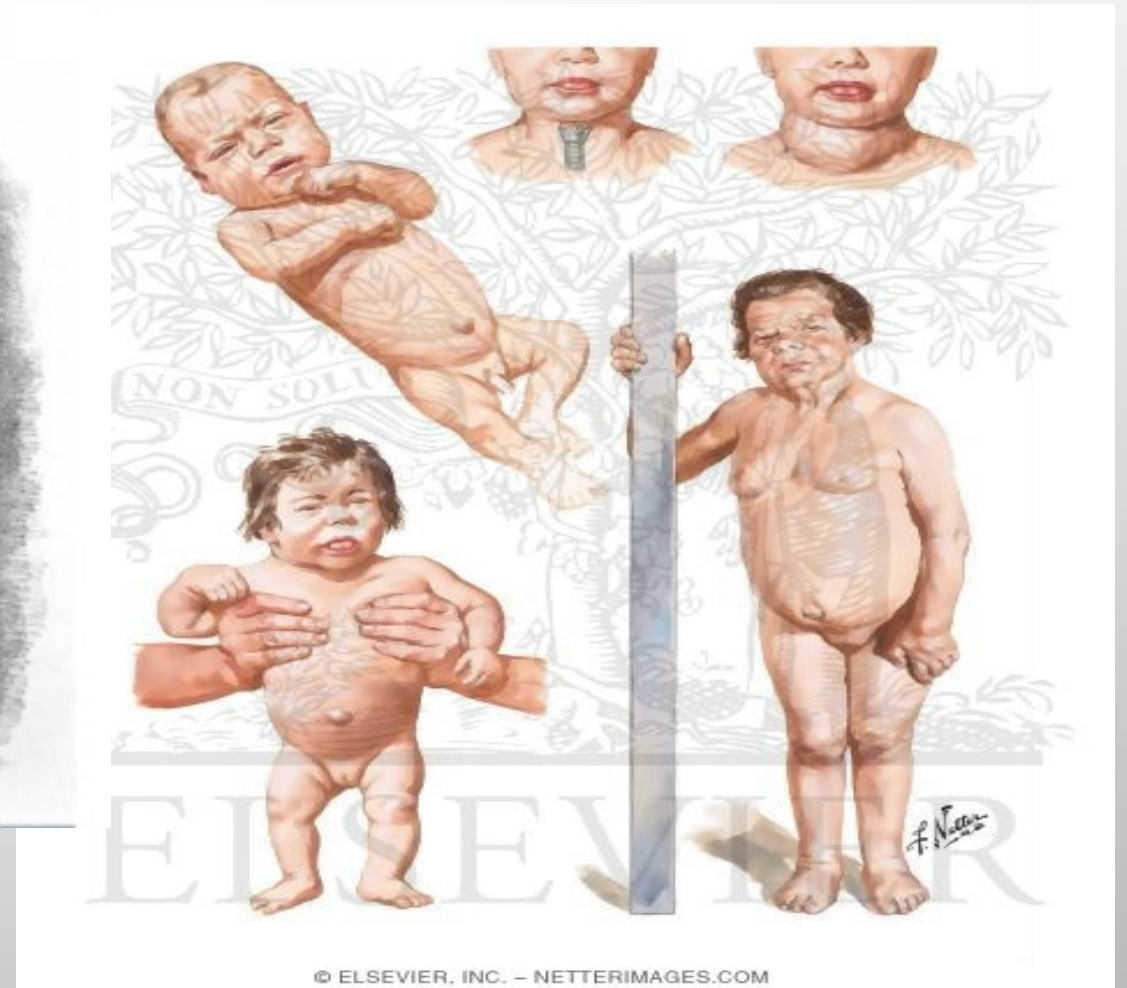
a) Hashimoto's
thyroiditis

b) Autoimmune inflammatory disorder ccc by
gradual thyroid failure

c) **Askanazy cells or Hurthle cells**
Epithelial cells become larger in size
with abundant eosinophilic granular cytoplasm

d) painless thyroid enlargement
usually associated with some degree of
hypothyroidism. Hyperthyroidism
(hashitoxicosis) can be seen early but is transient.

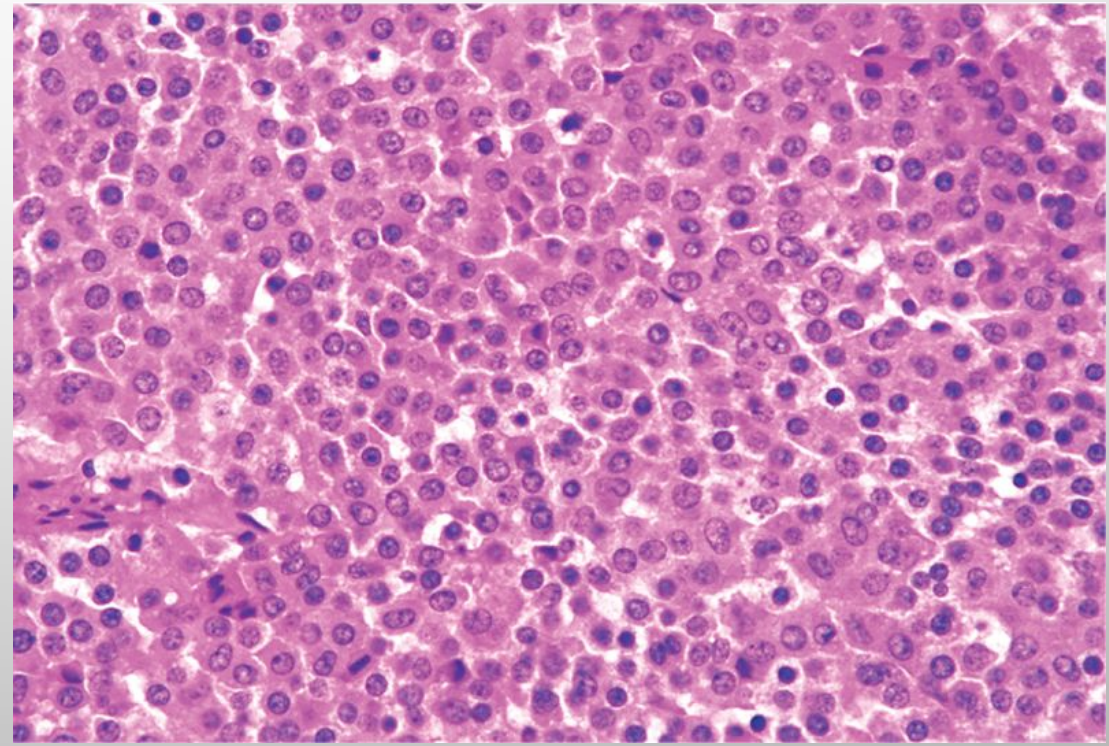
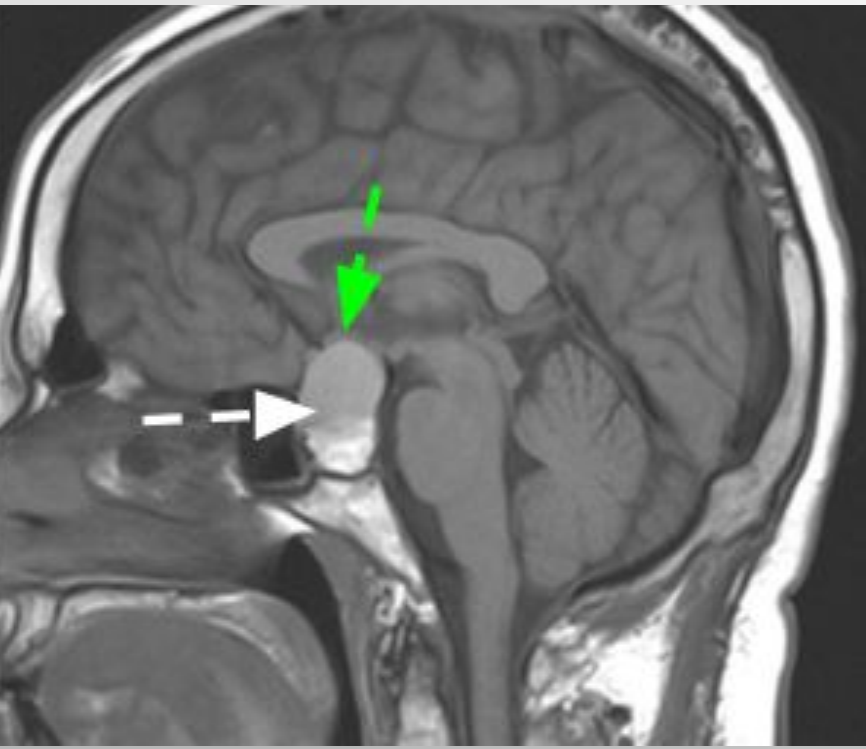
CASE.4: AN 8-MONTH-OLD INFANT IS BEING EVALUATED FOR GROWTH AND MENTAL RETARDATION. PHYSICAL EXAMINATION REVEALS A SMALL INFANT WITH DRY, ROUGH SKIN; A PROTUBERANT ABDOMEN; PERIORBITAL EDEMA; A FLATTENED, BROAD NOSE; AND A LARGE, PROTUBERANT TONGUE. WHAT DO YOU THINK CAUSE OF THIS INFANT'S SIGNS AND SYMPTOMS?



THE ANSWER

THE CONSEQUENCES OF EXCESS OR INADEQUATE THYROID HORMONE ARE DIRECTLY ATTRIBUTED TO ABNORMALITIES INVOLVING THE NORMAL FUNCTIONING OF THYROID HORMONES, SUCH AS REGULATION OF BODY PROCESSES. FOR EXAMPLE, EXCESS THYROID HORMONE (HYPERTHYROIDISM) RESULTS IN WEIGHT LOSS (INCREASED LIPOLYSIS) DESPITE INCREASED FOOD INTAKE, HEAT INTOLERANCE, INCREASED HEART RATE, TREMOR, NERVOUSNESS, AND WEAKNESS (DUE TO LOSS IN MUSCLE MASS). INADEQUATE LEVELS OF THYROID HORMONE (HYPOTHYROIDISM) PRODUCE DIFFERENT SIGNS AND SYMPTOMS IN CHILDREN THAN IN OLDER CHILDREN AND ADULTS. IN YOUNG CHILDREN HYPOTHYROIDISM PRODUCES CRETINISM, A DISEASE THAT IS CHARACTERIZED BY MARKED RETARDATION OF PHYSICAL AND MENTAL GROWTH (SEVERE MENTAL RETARDATION). PATIENTS DEVELOP DRY, ROUGH SKIN AND A PROTUBERANT ABDOMEN. CHARACTERISTIC FACIAL FEATURES INCLUDE PERIORBITAL EDEMA; A FLATTENED, BROAD NOSE;

CASE5: A 55-YEAR-OLD WOMAN PRESENTS WITH INCREASING MUSCLE WEAKNESS AND FATIGUE. PHYSICAL EXAMINATION FINDS AN OBESE ADULT WOMAN WITH PURPLE ABDOMINAL STRIA AND INCREASED FACIAL HAIR. THE EXCESS ADIPOSE TISSUE IS MAINLY DISTRIBUTED IN HER FACE, NECK, AND TRUNK. LABORATORY EVALUATION FINDS INCREASED PLASMA LEVELS OF CORTISOL AND GLUCOSE. CT SCAN SHOWS SUPRA-SELLAR MASS. HISTOPATHOLOGICAL EXAMINATION REVEALS **THE PRESENCE OF MONOMORPHIC CELLS THAT LACKS THE CONNECTIVE TISSUES IN BETWEEN. WHAT IS THE MOST LIKELY DIAGNOSIS?**



ANSWER

THE CLINICAL EFFECTS OF EXCESS CORTISOL ARE CALLED CUSHING'S SYNDROME. MANY OF THE SYMPTOMS OF CUSHING'S SYNDROME THAT RESULT FROM EXCESS CORTISOL PRODUCTION CAN BE DIRECTLY RELATED TO THE NORMAL FUNCTION OF CORTISOL. BECAUSE CORTISOL IS A GLUCOCORTICOID, ITS MAJOR FUNCTION INVOLVES THE MAINTENANCE OF NORMAL BLOOD GLUCOSE LEVELS. IN THIS REGARD CORTISOL INCREASES GLUCONEOGENESIS AND GLYCOGEN STORAGE IN THE LIVER.